

Appln No. 10/728,808
Amdt. Dated February 8, 2006
Response to Office Action of December 13, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A separable two-part mold for forming wafer scale caps ~~to be attached to a wafer~~, the separable mold comprising:

a first mold element;

a first release element which is releaseably coupled to the first mold element to form an upper mold section;

a second mold element;

a second release element which is releasably coupled to the second mold element to form a lower mold section;

mold cavities being defined by the upper mold section being positioned adjacently to the lower mold section, each cavity having a shape comprising half and a second half, the first half and second half being made from the same material as the wafer;

~~the first half and second half, when brought together defining mold cavities for wafer scale caps, the mold cavities having a spacing which corresponds to a spacing provided on the wafer, the mold cavities having a shape for forming caps having a central cavity areas surrounded by sidewall cavity areas, the side walls having free edges.~~

2. (Original) The mold of claim 1, wherein:
the mold is made from a semiconductor.

3. - 6. (Cancelled)

7. (Currently Amended) The mold of claim 1, wherein:
the first half mold element of the mold has a lower surface in which recesses are formed;

the second mold half element having an upper surface in which grooves are formed;
the recesses and grooves defining the plurality of mold cavities for the caps.

8. (Currently Amended) The mold of claim 7, wherein:
the first half mold element includes first holes formed therethrough-it;
the first holes are located in registry with the recesses;

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the first release element having first pins projecting therefrom;
~~there being provided a first half release wafer from which project pins;~~
the pins located in registry with the first holes;
the first half-mold element having a thickness in the area of the first holes, the first pins being longer than the thickness;
the first half-release ~~wafer element~~ having a first position in which the pins are flush with an interior end of the first holes; and
there being a gap between the first half-mold element and the first ~~half-release wafer element~~ when the first ~~half-release wafer element~~ is in the first position.

9. (Currently Amended) The mold of claim 7, wherein:
the second half-mold element includes second holes formed therethrough it;
the second release portion having second pins projecting therefrom;
~~there being provided a second half release wafer from which project pins;~~
the second pins located in registry with the second holes;
the second mold element ~~half~~ having a thickness in the area of the second holes, the pins being longer than the thickness;
the second half-release ~~elementwafer~~ having a first position in which the pins are flush with an interior end of the second holes;
there being a second gap between the second half-mold element and the second ~~half release wafer element~~ when the second half-release ~~elementwafer~~ is in the first position.

10. (Original) The mold of claim 9, wherein:
the second holes are located in registry with the grooves.

11. (Original) The mold of claim 1, wherein:
the first and second halves are comprised of a semiconductor that is transparent to infrared light of a wavelength of about 1000 -5000 nm.

12. (Original) The mold of claim 8, wherein:
the first and second halves and the first half release wafer are comprised of a semiconductor that is substantially transparent to infrared light of a wavelength of about 1000 -5000 nm.

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13. (Currently Amended) The mold of claim 7, wherein:

- ~~the first half-mold portion includes first holes formed therethrough it;~~
- the first holes located in registry with the recesses;
- ~~the first release portion having first pins projecting therefrom: there being~~
- ~~provided a first half-release wafer from which project pins;~~
- the first pins located in registry with the first holes;
- the first half-mold element having a thickness in the area of the first holes, the first pins being longer than the thickness;
- the first half-release ~~wafer element~~ having a first position in which the first pins are flush with an interior end of the first holes;
- there being a gap between the first half-mold element and the first half-release ~~wafer element~~ when the first half-release ~~element~~ wafer is in the first position; and
- the second half-mold portion includes second holes formed through it;
- ~~the second release portion having second pins projecting therefrom;~~
- ~~there being provided a second half-release wafer from which project pins;~~
- the second pins located in registry with the second holes;
- the second half-mold element having a thickness in the area of the second holes, the pins being longer than the thickness;
- the second half-release ~~wafer element~~ having a first-second position in which the second pins are flush with an interior end of the second holes;
- there being a second gap between the second half and the second half-release ~~wafer element~~ when the second half-release ~~wafer element~~ is in the first position.

14. (Original) The mold of claim 13, wherein:

- the first mold element ~~and the second halves-mold element, and the first release element and the second half-release wafers element~~ are comprised of a semiconductor that is transparent to infrared light of a wavelength of about 1000 -5000 nm.

15. (Original) The mold of claim 1, wherein:

- the first half-mold element has first portions which separate adjacent areas; and
- the second half-mold element has second portions which separate adjacent grooves;
- ~~the first and second portions coming together when the halves are brought together such that material is squeezed out from between the first and second portions, separating adjacent caps.~~

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16. - 20. (Cancelled)

21. (New) The mold according to claim 1, wherein the first mold element, the first release element, the second mold element and the second release element are separate elements.